CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 93-094
AMENDING SITE CLEANUP REQUIREMENTS ORDER NO. 88-041

MOTOROLA COMPUTER SYSTEMS, INC.
AND TANDEM COMPUTERS INC.
19333 VALLCO PARKWAY
CUPERTINO, SANTA CLARA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region, hereinafter called the Board, finds that:

Site Description

1. Motorola Computer Systems, Inc. (formerly Four-Phase Systems) leased the property from Vallco Park, Ltd. at 19333 Vallco Parkway from 1974 to 1978. Motorola vacated the facility in 1978 and it was subsequently leased to Tandem Computers Inc.

Site History

2. On March 16, 1988, the Board adopted Site Cleanup Requirements Order No. 88-041, naming Motorola Computer Systems, Inc. and Tandem Computers Inc. as dischargers of certain solvents and waste byproducts generated from their semiconductor production processes and released from their subsurface solvent storage and acid neutralization systems.

3. After removal of the subsurface storage facilities, analysis of soil samples identified trichlorethylene, xylene, ethylbenzene, Freon 113, 1,2-DCE and toluene as contaminants.

Soil and Groundwater Contamination

4. In 1985, a vacuum extraction system was constructed to remove the soil's volatile organic pollutants. The system removed significant amounts of volatile contaminants. On April 11, 1988, Board staff accepted the discharger's April 4, 1988 Work Plan, which found that the vapor extraction system was no longer effective and the vapor extraction wells could be sealed, and accepted the ground water sampling plan, which described a 5 year long ground water sampling period to confirm that water quality is being maintained by the soil cleanup already achieved. The 5 year period ended in 1992.

5. The discharger submitted the 1992 Annual Groundwater Monitoring and Sampling Summary Report, which summarizes the results of a total of ten rounds of sampling that occurred in twice yearly sampling in April and October of five years 1988 through 1992 for wells CB-1, CB-4 and OW-2. EPA Method 8010 was used on 8 sampling rounds and EPA Method 8020 was used on 5 sampling rounds. EPA Methods 8010 and 8020 were used for purgeable priority pollutants, including Freon 113 and xylenes. EPA Method 8240 was used on all ten sampling rounds and EPA Method 8060 was used on 6 sampling rounds. EPA Methods 8240 and 8060 were used for phthalates and nonpriority pollutants. The following contaminants were of concern:

a. Freon 113 was detected in CB-1 and CB-4 during most of the sampling rounds in concentrations as high as 0.012 mg/l in CB-1 (10/88). The California drinking water maximum contaminant level (MCL) standard is 1.2 mg/l for Freon 113. Freon 113 is no longer considered a threat to waters of the State at this site.

b. Toluene in OW-2 was detected as high as 0.004 mg/l in October 1989 and less than detection level (0.001 mg/l) for the following five sampling rounds. The federal MCL is 1 mg/l for toluene. Toluene is no longer considered a threat to waters of the State at this site.

c. Phthalates were detected in all three wells as high as 0.024 mg/l for dimethl phthalate in CB-1 on October 1988. The State MCL is 0.004 mg/l for dimethyl phthalate. The state MCL was exceeded once in well CB-1, twice in well CB-4, and twice in well OW-2. During three rounds of sampling at each well the detection limit for this contaminant was <0.05 mg/L, which is greater than the state's regulatory limit. No sampling was done for phthalates for the reports of October 1990, April 1991, October 1991, and October 1992. Sampling was done for the April 1992 report. Since the semiannual report of October 1989, there has been no sampling for phthalates that is adequate for detection of an MCL violation. Order 88-041 required EPA Method 8060 for phthalates to be conducted biennially for the three wells. This test was not done for the April 1991 sampling round.

6. This order amends Order 88-041 to extend phthalate ground water monitoring for another four calendar quarters.

Basin Plan Requirements

7. The Board adopted a revised Water Quality Control Plan for the San Francisco Bay Region (Basin Plan) on December 17, 1986 and amended it on August 19, 1987, July 18, 1989 and December 11, 1992. This Order implements the water quality objectives for the Basin Plan.

8. The existing and potential beneficial uses of the ground water in the area are:

   a. Municipal Supply;
   b. Industrial Process and Service Supply; and,
   c. Agricultural Supply.

9. This action is an Order to enforce the laws and regulations administered by the Board. This action is categorically exempt from the provisions of the CEQA pursuant to Section 15321, Title 14, CCR.

10. The Board has notified the Discharger and interested agencies and persons of its intent under California Water Code Section 13304 to prescribe Site Cleanup Requirements for the discharge and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.

11. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED, pursuant to Section 13304 of the California Water Code, that the dischargers shall cleanup and abate the effects described in the above findings as follows:

1. Provision C.2.b. and provison 5 are deleted.

2. Provision C.2.c. is replaced with the following: Submit an annual technical report acceptable to the Executive Officer which includes sampling results from the groundwater monitoring wells and a summary of all sampling results including sampling dates, analytical methods and copies of all laboratory reports in accordance with Part A and Part B of the self-monitoring program. Include in this report updated groundwater elevation and flow direction maps from nearby wells monitored by the Santa Clara Valley Water District and on-site well OW-2. The locations of these wells are indicated in Figure 1. The report shall also include tables containing water level measurments. This report shall also include an evaluation of whether additional remedial measures are necessary and whether a reduced monitoring program is appropriate. Recommend any additional measures for final cleanup and a monitoring program. This recommendation will be reviewed by Regional Board staff and the Regional Board will determine if the recommended plan is acceptable.

   REPORT DUE: No later than October 1, 1994.

3. Add Provision 15 as follows: The Discharger is required to reimburse the State for all reasonable costs of the State incurred in overseeing or contracting for cleanup or abatement efforts.

4. Add Provision 16 as follows: The Discharger shall maintain a copy of this order at the project field office so as to be available at all times to project personnel.

5. Add Provision 17 as follows: The Discharger's technical reports hereof shall include a projection of the cost, effectiveness, benefits, and impact on public health, welfare, and environment of each alternative measure. The reports shall consider the guidance provided by the State Water Resources Control Board's Resolution No. 68-16, "Statement of Policy with Respect to Maintaining High Quality of Waters in California".

6. Add Provision 18 as follows: Technical reports, submitted by the Discharger, in compliance with the Prohibitions, Specifications, and Provisions of this Order shall be submitted to the Board on the schedule specified herein. These reports shall consist of a letter report that includes the following:

   a. A summary of work completed since submittal of the previous report and work projected to be completed by the time of the next report;

   b. Identification of any obstacles which may threaten compliance with the schedule of this Order and what actions are being taken to overcome these obstacles;

c. In the event of non-compliance with any Prohibition, Specification or Provision of this Order, written notification which clarifies the reasons for non-compliance and which proposes specific measures and a schedule to achieve compliance. This written notification shall identify work not completed that was projected for completion, and shall identify the impact of non-compliance on achieving compliance with the remaining requirements of this Order; and,

d. In the first self-monitoring report, an evaluation of the current ground water monitoring system and a proposal for modifications as appropriate.

7. Add Provision 19 as follows: The Board considers the property owner and site operator to have a continuing responsibility for correcting any problems within their reasonable control which arise in the future as a result of this waste discharge or water applied to this property during subsequent use of the land for other purposes.

8. Add Provision 20 as follows: These requirements do not authorize the commission of any act causing injury to the property of another or of the public, do not convey any property rights, do not remove liability under federal, state or local laws, and do not authorize the discharge of waste without the appropriate federal, state or local permits, authorizations, or determinations.

9. Provision 13 shall be replaced as follows: If any hazardous substance is discharged in or on any waters of the state, or discharged and deposited, or probably will be discharged in or on any waters of the state, the Discharger shall

(1) Report such discharge to the following:

(a) This Regional Board at (510) 286-1255 on weekdays during office hours from 8 a.m. to 5 p.m.; and,
(b) The Office of Emergency Services at (800) 852-7550.

(2) A written report shall be filed with the Regional Board within five working days and shall contain information relative to the following:

(a) The nature of waste or pollutant;
(b) The quantity involved and the duration of incident;
(c) The cause of spill;
(d) The estimated size of affected area;
(e) The corrective measures that have been taken or planned, and a schedule of these measures; and,
(f) The persons/agencies notified.

10. Add Provision 21 as follows: If the Discharger is delayed, interrupted or prevented from meeting one or more of the completion dates specified in this Order, the Discharger shall promptly notify the Executive Officer and the Board shall consider revision to this Order.

I, Steven R. Ritchie, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region on August 18, 1993.

Steven R. Ritchie
Executive Officer

Attachments:
Self-Monitoring Program

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM

FOR

MOTOROLA COMPUTER SYSTEMS, INC. AND TANDEM COMPUTERS INC.
19333 VALLCO PARKWAY, CUPERTINO, SANTA CLARA COUNTY

SITE CLEANUP REQUIREMENTS

ORDER NO. 93-094

CONSISTS OF

PART A

AND

PART B

PART A

A. General

1. Reporting responsibilities of waste Dischargers are specified in Sections 13225(a), 13267(b), 13383, and 13387(b) of the California Water Code and this Regional Board's Resolution No.73-16.

2. The principal purposes of a self-monitoring program by a waste Discharger are the following:

   a. To document compliance with Site Cleanup Requirements and prohibitions established by the Board;

   b. To facilitate self-policing by the waste Discharger in the prevention and abatement of pollution arising from waste discharge;

   c. To develop or assist in the development of standards of performance, toxicity standards and other standards; and,

   d. To prepare water and wastewater quality inventories.

B. Sampling And Analytical Methods

1. Sample collection, storage, and analyses shall be performed according to the most recent version of Standard Methods for the Analysis of Wastewater, and Test Methods for Evaluating Solid Waste EPA Document SW-846, or other EPA approved methods and in accordance with an approved sampling and analysis plan.

2. Water and waste analysis (except total suspended solids) shall be performed by a laboratory approved for these analyses by the State Department of Health. The director of the laboratory whose name appears on the certification shall supervise all analytical work in his/her laboratory and shall sign all reports of such work submitted to the Regional Board.

3. All monitoring instruments and equipment shall be properly calibrated and maintained to ensure accuracy of measurements.

C. Definition Of Terms

1. A grab sample is a discrete sample collected at any time.

2. Duly authorized representative is a duly authorized representative may thus be either a named individual or any individual occupying a named position such as the following:

a. Authorization is made in writing by a principal executive officer; or,

b. Authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as general partner in a partnership, sole proprietor in a sole proprietorship, the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company.

D. Schedule Of Sampling, Analysis, And Observations

1. The Discharger is required to perform sampling, analysis, and observations according to the schedule specified in Part B, and the requirements in Article 5 of Chapter 15.

2. A statistical analysis shall be performed and reported annually as described in the current revision of Appendix II of Chapter 15.

E. Records To Be Maintained By The Discharger

1. Written reports shall be maintained by the Discharger for ground water monitoring and wastewater sampling, and shall be retained for a minimum of three years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge or when requested by the Board. Such records shall show the following for each sample:

a. Identity of sample and sample station number;
b. Date and time of sampling;
c. Method of composite sampling (See Section C-Definition of Terms);
d. Date and time that analyses are started and completed, and name of the personnel performing the analyses;
e. Complete procedure used, including method of preserving the sample, and the identity and volumes of reagents used. A reference to a specific section of a reference required in Part A Section B is satisfactory;
f. Calculation of results;
g. Results of analyses, and detection limits for each analyses; and,
h. Chain of custody forms for each sample.

F. Reports To Be Filed With The Board

1. Ground water monitoring results shall be issued in an annual report. Written self-monitoring reports shall be filed no later than October 1, 1994. The annual report shall be filed as indicated. The reports shall be comprised of the following:

a. Letter of Transmittal - A letter transmitting the essential points in each self-monitoring report should accompany each report. Such a letter shall include a discussion of any requirement violations found during the last report period, and actions taken or planned for correcting the violations, such as, operation

and/or facilities modifications. If the Discharger has previously submitted a detailed time schedule for correcting requirement violations, a reference to the correspondence transmitting such schedule will be satisfactory. If no violations have occurred in the last report period this shall be stated in the letter of transmittal. Monitoring reports and the letter transmitting the monitoring reports shall be signed by a principal executive officer at the level of vice president or his duly authorized representative, if such representative is responsible for the overall operation of the facility from which the discharge originates. The letter shall contain a statement by the official, under penalty of perjury, that to the best of the signer's knowledge the report is true, complete, and correct. The letter shall contain the following certification:

"I certify under penalty of law that this document and all attachments are prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who managed the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

b. Each monitoring report shall include a compliance evaluation summary sheet. Until the Order's amended to specify ground water protection standards, the following shall apply and the compliance sheet shall contain:

   i. The method and time of water level measurement, the type of pump used for purging, pump placement in the well, method of purging, pumping rate, equipment and methods used to monitor field pH, temperature, and conductivity during purging, calibration of the field equipment, results of the pH, temperature conductivity and turbidity testing, well recovery time, and method of disposing of the purge water; and,

   ii. Type of pump used, pump placement for sampling, a detailed description of the sampling procedure; number and description of equipment, field and travel blanks; number and description of duplicate samples; type of sample containers and preservatives used, the date and time of sampling, the name and qualifications of the person actually taking the samples, and any other observations; the chain of custody record.

c. A summary of the status of any remediation work performed during the reporting period. This shall be a brief and concise summary of the work initiated and completed as follows:

   i. As interim corrective action measures; and,

ii. To define the extent and rate of migrations of waste constituents in the soil and ground water at the site.

d. The Discharger shall describe, in the annual report, the reasons for significant increases in a pollutant concentration at a well onsite. The description shall include the following:

i. The source of the increase;

ii. How the Discharger determined or will investigate the source of the increase; and,

iii. What source removal measures have been completed or will be proposed.

e. Laboratory statements of results of analyses specified in Part B must be included in each report. The director of the laboratory whose name appears on the laboratory certification shall supervise all analytical work in his/her laboratory and shall sign all reports of such work submitted to the Board. The following information shall be provided:

i. The methods of analyses and detection limits must be appropriate for the expected concentrations. Specific methods of analyses must be identified. If methods other than EPA approved methods or Standard Methods are used, the exact methodology must be submitted for review; and,

ii. In addition to the results of the analyses, laboratory quality control/quality assurance (QA/QC) information must be included in the monitoring report. The laboratory QA/QC information should include the method, equipment and analytical detection limits; the recovery rates; an explanation for any recovery rate that is less than 80%; the results of equipment and method blanks; the results of spiked and surrogate samples; the frequency of quality control analysis; and the name and qualifications of the person(s) performing the analyses.

f. By October 1, 1994, the Discharger shall submit an annual report to the Board covering the previous four quarters. This report shall contain:

i. Tabular and graphical summaries of the monitoring data obtained during the previous year;

ii. A comprehensive discussion of the compliance record, and the corrective actions taken or planned which may be needed to bring the Discharger into full compliance with the Site Cleanup Requirements; and,

iii. A written summary of the ground water analyses indicating any change in the quality of the ground water.

G. In the event the Discharger violates of threatens to violate the conditions of the Site Cleanup Requirements and prohibitions or intends to experience a plant bypass or treatment unit bypass due to:

1. Maintenance work, power failures, or breakdown of waste treatment equipment, or;
2. Accidents caused by human error or negligence, or;
3. Other causes, such as acts of nature.

The Discharger shall notify the Regional Board office by telephone as soon as he or his agents have knowledge of the incident and confirm this notification in writing within 7 working days of the telephone notification. The written report shall include time and date, duration and estimated volume of waste bypassed, method used in estimating volume and person notified of the incident. The report shall include pertinent information explaining reasons for the noncompliance and shall indicate what steps were taken to prevent the problem from recurring.

In addition, the waste Discharger shall promptly accelerate his monitoring program to analyze the discharge at least once every day. Such daily analyses shall continue until such time as the effluent limits have been attained, until bypassing stops or until such time as the Executive Officer determines to be appropriate. The results of such monitoring shall be included in the regular Self-Monitoring Report.

Part B

A. Description Of Observation Stations And Schedule Of Observations

1. The observation stations shall consist of 3 existing ground water monitoring wells (OW-2, CB-1, and CB-4) and any additional ground water monitoring wells added during the soil and ground water characterization or the evaluation of remediation work.

2. The schedule of well observations and grab sampling shall be conducted quarterly after July 1993 and within the months of October, January, April, July.

B. Observations and Test Procedures

1. The ground water well observations shall consist of the following:

   a. Water elevation reported to the nearest 0.1 inch for both depth to water from the ground surface and the elevation of the ground water level;

   b. Ground water temperature measured at the time of sampling and reported in degrees Fahrenheit;

   c. Ground water conductivity measured at the time of sampling as per Standard Methods 205 using potentiometric methodology;

   d. Ground water pH measured at the time of sampling as per Standard Methods 423 using potentiometric methodology; and,

   e. Ground water turbidity measured at the time of sampling.

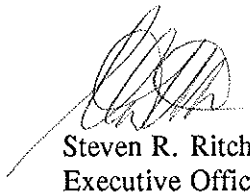
2. The test procedures for the ground water samples and soil samples shall be as described herein. Phthalate using EPA method 8270.

I, Steven R. Ritchie, Executive Officer, hereby certify that the foregoing Self-Monitoring Program is as follows:

1. Developed in accordance with the procedures set forth in this Board's Resolution No. 73-16;

2. Effective on the date shown below; and,

3. May be reviewed or modified at any time subsequent to the effective date, upon written notice from the Executive Officer, or request from the Discharger.



Steven R. Ritchie
Executive Officer

Date Ordered